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### MANIA TRANSITORIA.

By EDWARD JARVIS, M.D., of Dorchester.

THIS is a form of mental disorder which suddenly appears in persons previously sound or not disposed to be unsound in mind; it has a short duration and suddenly disappears.

This is not exclusively a new or an old doctrine, but it has been taught in France and Germany for many years, by the managers of the insane, and by writers on these topics. It is recognized by psychological authorities in Great Britain. It is admitted and established by jurists and courts in Europe, in their management of persons who have committed acts which would otherwise have been considered as crimes, and for which they would have otherwise been doomed to death on the scaffold.

The case of Andrews, who was tried at Plymouth in December last, for homicide, has brought this subject prominently before the public here. As there is a difference of opinion in regard to this doctrine, especially in its application to the case of Andrews, it may be well to present the views of those who have written upon it, in connection with an account of Andrews's agency in the homicide, and of his trial.

Dr. Henry Maudsley, manager of a lunatic asylum at Hanwell, near London, and one of the editors of the *Journal of Mental Science*, says, "Cases of insanity are occasionally observed in which an attack of mania suddenly comes on, and soon passes away, so that although there is no epileptic fit, one can scarce avoid looking upon the attack as a sort of epilepsay. Now this Mania Transitoria may take on the homicidal form."<sup>\*</sup>

He quotes from the *Journal de Med. et Chir. Pratig.*, 1833, the case of a shoemaker, who was of industrious, sober habits. He arose early one morning to go to work. In a short time his wife was struck

with his wild look and incoherent talk. He suddenly (*tout à coup*) seized a knife and rushed upon his wife to kill her. She had hardly time to escape with her child. Dr. Lowenthal was called. He bled and gave other remedies to the maniac. In the afternoon he was quiet. In the evening he regained the use of his faculties, but he had no recollection afterwards of the events of that morning.

Castelnau calls this *La Folie Instantanée, temporaire, passagère*, "mania instantaneous, transitory, temporary, fleeting, a mental disorder, which breaks out suddenly, like the sudden loss of sense in some physical diseases, and the subject is urged in a moment to automatic acts, which could not have been foreseen."<sup>\*\*</sup>

"The first act of the mania may be homicide, and the disease may pursue its course under the continued or intermittent form, but when the act of violence or homicide is the only maniacal manifestation, it is instantaneous, temporary, fleeting, transitory, insanity according to Henke, Marc, Cazauvielh, &c."

He quotes, in illustration, from Hiem of Berlin, the case of a councillor of state, who had ever enjoyed good health. He suddenly awoke one night, breathing stertorously. His wife endeavored to aid him. He assailed her with the most violent fury, and tried to throw her out of the window. After a struggle for half an hour he was exhausted. An emetic put an end to the paroxysm, and for fourteen years he had had no other attack.<sup>†</sup>

A laboring man of Gard, returning from his work, met his wife, and asked her if supper was ready. She immediately seized a knife and struck him a fatal blow. She had not been insane, though excitable, and belonged to an insane family.<sup>‡</sup>

Castelnau, referring to this form of mental disorder, says, "I could show by facts, already so numerous, recorded in the works of physicians devoted to the study of in-

\* Dr. Ph. Boileau de Castelnau in *Annales d'Hygiène Publique et de Médecine Légale*, xlv. 217.

† Castelnau, *Ann. Hyg. et Méd. Leg.* xlv. 222.

‡ Ibid., 293.

\* *Jour. Mental Science*, lx. 335.

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sanity, and the observations of the insane, the existence of a mental malady which society has the greatest interest to know, in order to prevent consequences dangerous to the community and to the person affected."<sup>\*</sup>

Again Castelnau says, "We could cite a great number of facts, but these are sufficient to show that the various kinds of insanity, as of all the diseases of the organism, can establish themselves in a manner either progressive or sudden, and have a progress slow or rapid, continued, intermittent, or temporary."<sup>†</sup>

After a great variety of facts and arguments, Castelnau, at the end of his essay, says in conclusion, "There exist these instantaneous changes in the mental faculties, that is, instantaneous insanity."<sup>‡</sup>

"These changes have their first and only manifestation in a single act of qualified crime."<sup>§</sup>

Castelnau's essay was published in 1851; seven years later, Dec. 14, 1858, M. Le Dr. A. Devergie read, before the Imperial Academy of France, an essay on the questions, "Where does reason end? Where does insanity begin?" This was printed in the *Annales d'Hygiène Publique et de Médecine Legale*, in 1859, vol. xi., second series. He confirms the opinions of Castelnau, in regard to instantaneous and transient insanity, except that he qualifies them with the certainty or probability, that all or nearly all these cases had been preceded by hereditary taint or some mental disease or irregularity in greater or less degree.

"Besides those cases of insanity produced under all these causes, is another mode of alienation, to which they give the name of *Transitory Insanity* (*folie transitoire*), that is to say, without preceding apparent symptoms, without cause, near or remote, appreciable to the world, bursting out as suddenly (*brusquement*) as a clap of thunder, and ceasing completely with a criminal act."<sup>§</sup>

"No motive for the act, either in un-governed passions, or in acquired ideas; previous character and manner without reproach; absence of hallucinations; the explosion of the mania manifesting itself in one act of violence or crime, and the immediate return of reason after this act is accomplished; these, in my opinion, are the characters of *transitory insanity*."<sup>||</sup>

Devergie qualifies this description as above indicated:—"Nevertheless the word *transitory*, perfectly just for the world, in the sense that the mania was fleeting (*passagère*), although the act was of the most criminal nature, does not seem sufficiently exact for the physician. The persons of this description should not be considered as sound in mind when the idea of crime suddenly rises within them, and becomes the ruling thought, irresistible, stronger than their own will. The antecedents of their families, hereditary taint, divers acts of social life, propensities and tastes perverted, tendencies to silence and abstraction, thoughts of suicide, for years existing in many, have been the forerunners of the sudden outburst of irresistible criminal mania."<sup>\*</sup>

Devergie quotes the case of a young man of 19, son of a merchant of Bordeaux. He had been most regular and exemplary in all his previous life, an affectionate brother, dutiful son, faithful to his employer, a banker, and the heir of an immense fortune, but he was the child of insane parentage, and had a mother-in-law for whom he had a deep aversion. There was a dinner-party at his father's house, which passed without unusual incident. "At the time of the dessert, Julius, the youth, left the table, and went to the hall to warm himself; the fire was not burning; he then went to his chamber, took his gun and straw hat to walk in the fields as he was accustomed to do. Then the thought of suicide, which had troubled him for a month, suddenly presented itself, and as suddenly changed to the thought of killing his mother-in-law. He threw down the gun, went to his brother's chamber, took two pistols, which had been loaded three months, leaving his own pistols that he had loaded the evening before. He went to the dining-room where his mother-in-law was sitting at the table with his father, and discharged one of the pistols into her temple."<sup>†</sup> He was rational immediately afterwards, and, so far as is known, remained sane.

Upon this case Devergie remarks:—"If the act which young Julius committed was one of mania, it was in him a passage sudden and rapid from reason to insanity, and a return as sudden from insanity to reason. This then is a very exact example of that species of mania which is called *transitory*." This case was submitted to MM. Guirac and Delafosse of Bordeaux, Calmiel, Tardieu

\* Castelnau, *Ann. Hyg. et Med. Leg.* xlv. 216.

† *Ibid.*, 438.

‡ *Ibid.*, 998.

§ *Ann. Hyg. et Med. Leg.* xi. 2d Ser. 407.

|| *Ibid.*, 408.

\* *Ann. Hyg. et Med. Leg.* xi. 2d Ser. 408.

† *Ibid.*, 398.

and Devergie, who gave their opinion, "that Julius, at the moment of this action, had not the possession of his freedom of will," and the court and jury acquitted him fully of the charge of crime.\*

These doctrines are sustained by French lawyers, and put in practice by French courts and juries, in the trials of cases of this nature. "Bellard, a jurist (*jurisconsulte*) of high character, whom no one suspects of being indulgent, recognizes the reality of instantaneous insanity." He says, "There are some madmen whom nature condemns to eternal loss of reason, and others who only lose it for a moment (*instantanément*) by the effect of some great grief, surprise or other cause of this kind. There is no other difference between these two forms of mania than that of duration; and one whose head is turned for some hours or for some days is as completely insane, during this ephemeral action, as the one who is mad for many years." *Les aliénés devant les cours d'Assises.*†

To this Devergie adds, "So in the short period of thirty years or more, we have passed from incredulity, I may say, from ignorance the most profound of the nice distinctions of insanity, with such immense advance, that now our judges and juries accept as founded on evidence, not only delusions on a single point, monomania, but even those transitory aberrations of reason, which, in the judgment of the world, transform a man of previously honorable character into a criminal, and one so much the more wicked because he has covered his perversion of heart so completely as to conceal, through a long period of years, the baseness of his act under the garb of the most irreproachable life."‡

Esquirol says, "These deplorable homicidal impulses are spontaneous and fleeting, and without habitual delusion."§ Referring to murder by one in this condition, he says, "This presupposes the suppression of all intelligence, all sensibility and all volition. The following fact will best explain my meaning. A man, 32 years old, tall, thin in flesh, of a nervous temperament, amiable disposition, was educated with great care, and accomplished in the fine arts. He had had a cerebral affection from which he had recovered many months previous to his arrival in Paris, two months ago. There he conducted himself with great propriety, until one day, when he en-

tered the Palace of Justice, and there threw himself upon a lawyer and seized him by the throat. He was arrested and taken to prison, and put under my care on the same day. At my first visit, on the next day, he was calm, without anger or resentment, had slept all night, and had sketched a landscape. He spoke of his going to the court room the evening previous, coolly, but had no recollection of his conduct there or of his motives. Nor did he manifest any regret. He answered my questions courteously and with an air of sincerity. 'I went to the Palace of Justice, as I would to any other place, without any special purpose, merely as a sight seer. I not only had no ill will against the advocate, but did not even know him. I cannot understand how I could have committed such an outrage.' When I said, 'that it could be explained only by the sudden attack of some disease,' he said, 'you may explain it as you please, I am not conscious of having been ill, and I cannot tell how this could have happened.' During the three months that he remained under my observation he manifested not for an instant any disorder of the mind."\*

Castelnau says, "There is no want of authorities to establish the doctrine of instantaneous insanity." The observations made by writers on medical jurisprudence (*medicins legists*) of the present day leave no doubt of the existence of this mania of a few instants, during which men, who have never manifested insanity, all at once (*tout à coup*) are completely deprived of their reason, and give themselves up to the most deplorable excesses. The learned chief editor of *Journal du Medecin et de Chirurgie Pratique*, offers five examples of this kind of mania. In four of these, accidental circumstances only prevented persons, whose previous life had been irreproachable, from committing crimes. The fifth case was that of a woman who killed her mother and three others, and wounded a fourth person.†

Tuke quotes and refers to a large number of cases of impulsive homicidal mania, from Marc, Otto, Michu, Esquirol, Ray, and others, showing that some had delusions, some had inherited disease or defective cerebral organization, others had manifested irregularities of mind before, and some after the outbreak, and of a few nothing is shown except the single fact of sudden and short mania. Following this description of these cases, he adds:—

"To this analysis of cases, a brief sum-

\* *Ann. Hyg. et Méd. Leg.* xi. 2d Ser. 499.

† Castelnau in *Ann. Hyg. et Méd. Leg.* xiv. 217.

‡ *Ann. Hyg. et Méd. Leg.* xi. 2d Ser. 492.

§ *Malad. Mentales, sous les Rapports Médico-Légaux*, ii. 104.

\* *Malad. Mentales sous les Rapports Médico-Légaux*, ii. 102. † *Ann. Hyg. et Méd. Leg.* xiv. 221.

mary of the chief characteristics of homicidal insanity may be added. It manifests itself under very different mental conditions. It may or it may not be associated with decided lesions of the intellect. It may or it may not be impulsive in character. It may or it may not be preceded by appreciable premonitory symptoms. It may or it may not be manifested in early life. However, careful investigation will reveal, in the majority of cases, a disturbance, more or less, of the intellectual as well as of the moral faculties; leaving still a considerable number of cases in which there is a sudden, blind, motiveless, unreasoning impulse to kill."

"An inquiry into the patient's history will generally detect a change in the character. This, however, obviously cannot be looked for in cases where the mental disorder can be traced back into infancy or where the intellectual or moral defects are congenital."\*

In the analysis of cases, Take does not deny the facts as they are presented, the suddenness of the outbreak, the shortness of the paroxysm, nor the suddenness of the cessation, but he adds, that in most of the cases, the sudden and transitory disease was grafted on a mind, which was prepared for this attack by hereditary predisposition, by perversions, or eccentricities, or was otherwise unsound, though not manifestly insane, and that subsequent history showed that most of these were insane, and that after all these deductions, there were a considerable number in which no such preparatory condition could be proved.

Fortunately for the safety of society, these cases of sudden outbreak of mania in persons of sound mind are rare, and confined mostly to those whose brains are imperfect from heritage or impaired by intemperance, or indulgencies, eccentricities, or irregularities and indiscretions, which, though not amounting to disease of the mind nor recognized as such, yet prepared the way for its appearance, whenever a suitable exciting cause should present itself.

The seventy-five to a hundred cases of transitory mania reported are gathered from wide and manifold opportunities of observation in Europe and America, principally in France and Germany. Some psychologists of large experience have met none. Dr. Bell, at the trial of Rogers, after stating that he had had upwards of a thousand patients under his charge,† said, "I have heard of many cases where the disease was

only transitory, from Dr. Woodward and others, though I am not familiar with cases of such short duration, under my own observation."\*

Dr. Choate said that he had had charge of between three and four thousand patients at the Taunton Hospital in the course of fifteen years, and in that time he had not seen any such case.†

Although the cases of complete mania transitoria, involving the three essential elements, sudden outbreak, short duration, and sudden cessation are very rare, yet cases including one or more of these elements are more common.

#### SUDDEN OUTBREAK.

Pritchard says, that "many instances are known, in which a sudden impulse to commit some atrocious act, has arisen in the mind of a person otherwise apparently sane, and certainly in full possession of his intellectual faculties."‡

Esquirol says, "There are other monomaniacs who kill by instinctive impulse. They act without consciousness, without delusion, without motives. They destroy by a blind impulse, instantaneously, independent of their volition."§ Elsewhere, he speaks of persons who suddenly (*tout à coup*) change their relations to persons and things. They hate those whom they loved before, they are at war with all the world; a woman, the very image of candor and virtue, as meek in temper as modest in manner, who only speaks words of tenderness and generosity, a good daughter, wife, mother, all at once (*tout à coup*) she loses her reason. Her timidity is changed into audacity, her sweetness into ferocity, she now offers nothing but injury, blasphemy, obscenity; she exposes her person nakedly; she threatens her father, beats her husband, strangles her children."|| With a few the impulse is so violent and instantaneous there is no struggle of the will to resist, and the act follows immediately."¶

Esquirol quotes the case of a teamster from Le Marcure de Souabe, who "left home in perfect health, was suddenly (subitement) attacked with mania on the road. At Noglengen he abused a woman. At Unterlobengen he walked in front of his team with a hatchet in his hand. Before reaching Hussenhofen he struck a woman, the first person he met, several blows with his hatchet and left her prostrate in the ditch by the side of the road. Next he split open

\* Trial of Rogers, 156.

† Trial of Andrews, Pamphlet Report, p. 47.

‡ Treatise on Insanity, 27.

§ *Malad. Ment.* II. 99.

|| *Malad. Ment. Rapports Medico-Legals*, II. 131-132.

¶ *Ibid.*, p. 104.

\* Backnill and Take *On Insanity*, 201.

† Trial of Rogers, 149.

the head of a boy 13 years old. Then he buried his hatchet in the skull of a man 30 years old, and spilled his brain on the highway, and gave him many more blows on the body. Then he left his hatchet and his team and went on alone. Meeting two Jews, he attacked them, but they escaped. Next he attacked a peasant, who resisted him, and raised help to arrest him. They showed him the dead bodies. He then said, 'It was not I, but my evil spirit that committed these murders.'"<sup>\*</sup>

Castelnau says, that to numerous authorities already cited, he would add that of Dr. Lanier, a distinguished medical psychologist, who states in *Ann. Med. Psych.* that "from certain causes, persons are rendered powerless to resist an idea suddenly presenting itself to them, or not existing before. This idea may impel them to suicide, murder, theft, or other crime."<sup>†</sup>

Tuke quotes a case from Marc I. 242, of a man who in a paroxysm of fury cut his son's throat.<sup>‡</sup>

Dr. Ray, after describing many cases, under various categories, according to their characters, says, "In the first group, we have the simplest form of homicidal insanity, in which the desire to destroy life is not only prompted by no motive whatever and solely by violent impulse, but without any appreciable disorder of body or mind."<sup>§</sup> He quotes a case from Dr. Otto, in *Edinburgh Phenological Journal*, vi. 611, of a man 37 years old, who had had fits of giddiness. The state of his health was perfect, in mind as well as in body, when he walked out with his son, 10 years old. When near the water a strange feeling came over him, and it appeared like a matter of absolute necessity to drown himself and his son. While attempting it, the boy was taken from him; he plunged into the water, but was rescued and restored to his right mind. He then quietly described the whole, but could not explain the cause of the sudden rising of the desire to drown himself and his son. Probably the cause was a congestion of blood in the brain, such as had produced giddiness before."<sup>||</sup>

Dr. Ray gives another case, from Michu, sur la Monomaniac Homicide, 99. "A woman, ten days after confinement, suddenly having her eyes fixed upon her child, was seized with a desire to strangle it."<sup>¶</sup>

Dr. Ray, in the trial of Rogers, said

"Insane impulses often come on very suddenly, and appear to be uncontrollable."<sup>\*\*</sup>

At the same trial, Dr. Woodward said, "The outbreak or apparent commencement of the disorder is frequently abrupt and instantaneous."<sup>†</sup>

On the same occasion Dr. Bell said, "In cases of outbreak, the impulse is so sudden that the patient is hardly conscious of his acts."<sup>‡</sup> Tuke quotes a case from Marc of a man aged 60, dejected but not considered insane, who suddenly seized a hammer and struck a child on the head with it. He was much attached to the child.<sup>§</sup> And another, from the Newgate Calendar of William Brown, who strangled a child whom he accidentally met. He had never seen the child before, had no malice against him, and could give no motive for the act. He bore an exemplary character, and had never been suspected of being insane.<sup>||</sup>

Dr. Woodward, speaking of the cases of fifteen homicides under his care in the Worcester Hospital, says, that seven of them were not considered insane before they committed the act. They were at work at their several employments; were not observed by those associated with them to have any evidence of alienation; they knew as well as others right from wrong, how to manage their affairs, and conduct their business as well. The first overt act of insanity was the homicidal act, and that was impulsive.<sup>¶</sup>

Esquirol adds to the detailed description of a considerable number of cases of sudden and violent attacks of mania, "In these, the third series, the impulse is sudden, instantaneous (*subitè, instantané*), without reflection, stronger than the will. The murder is committed without interest, without motive, and frequently upon the dearest friends."<sup>\*\*\*</sup>

#### SHORT DURATION.

Besides the cases already quoted and referred to, which are distinctly described as sudden in their manifestation and disappearance, and short in their duration, there are many others, the beginning and ending of which are not specifically mentioned, but only spoken of as short, transitory, fleeting. It is a natural inference, that these also were rapid in their development and cessation. Yet not to assume more than is given, these are placed in this separate chapter, leaving it for those to whom it may seem probable, to conclude that the

\* *Malad. Ment. Rapports Medico-Legale*, ii. 832.

† *Ann. Med. Hyg. et Med. Leg.* xiv. 437.

‡ Bucknill and Tuke, 197.

§ *Med. Jurisprudence of Insanity*, 205.

|| *Ibid.*, 210.

¶ *Ibid.*, 214.

\* *Trial Rogers*, 163.

† *Ibid.*, 160.

‡ *Ibid.*, 157.

§ *Ibid.*, 158.

|| *Malad. Ment.* ii. 834.

¶ Bucknill and Tuke on *Insanity*, 196.

\*\*\* *Worcester Hospital Report*, x. 73.

outbreak was gradual and even manifest, both in its approach and in its fading away.

These cases are simply reported as of short duration, spasmodic, comprising a single paroxysm of lunacy, and that characterized only in the propensity to commit an act of violence or crime, or the actual perpetration of the deed.

Bucknill, in a note to his essay on Criminal Lunacy,\* quotes the opinion of Dr. Charles Winslow, given at the trial of Anne Brough for murder, that "cases of temporary insanity resulting in a desire to commit murder or suicide are very common."

Esquirol says, in one place, "These impulses are spontaneous and fleeting."† And in another, "The act accomplished, the access is over."‡

Dr. Ray recognizes this, when, at the trial of Rogers, he said, "The violence of the paroxysm may be as great in transient as in permanent mania." And again, "I do not consider the duration of the defendant's affection an essential particular."§

Dr. Woodward, in the same trial, said, "The impulse generally expends itself in a single act."|| "Cases of as short duration as the present are not infrequent, though they can hardly be called common."¶ "The outbreak of an insane person seems to be a safety-valve by which to let off his accumulated excitement."\*\*

#### SUDDEN RESTORATION.

"Recovery from insanity generally takes place gradually, though occasionally the disease may suddenly disappear, on the occasion of certain moral or physical impressions."†† In proof of this, Dr. Ray quotes several cases of sudden restoration to reason. One from Pinel, of a gentleman in a fit of depression or delusion, going to drown himself, but was attacked by robbers when near the water, and defended himself. While in this struggle, his reason returned, and his desire of self-destruction disappeared. Another case is from Dr. Rush, of a patient who became intensely alarmed when riding, by the horse running away. The fright took the place of the mania, which appeared no more. Rush mentions several other cases of sudden restoration of lunatics to their reason.

Prichard states several cases of sudden recovery in the English insane asylums.

Esquirol mentions a girl who was sud-

denly restored, by seeing the actual cautery which he was about to apply to her body. And another, who, at the appearance of the catamenia, suddenly found her reason come back to her. He quotes a third case, in which the insane idea of long standing disappeared almost suddenly (*presque tout à coup*).\*

Dr. Ray, in the trial of Rogers, said, "Crises are sometimes observed in insanity, where the force of the disorder seems to expend itself in a single moment or upon some particular occasion."†

#### CALMNESS AFTER THE ACT OF VIOLENCE.

After a deed of violence by the homicide, his agitation sometimes ceases, and he is as calm and indifferent as if he were merely an uninterested spectator. Peter Neilson, in Scotland, drowned four of his children in a pit, then returned and told the people what he had done. He went back to the pit with the people and saw the dead bodies, without emotion.‡ Rice, who, in Concord a few years ago, killed his father, in the house, with the tooth of a harrow, and then threw him down the cellar stairs, was immediately calm, sat down by his mother's side and told her that they would say that his father fell down stairs and broke his head in the fall. Dr. Woodward mentions the case of a man in the hospital who, in a sudden impulse of excitement, seized a bludgeon, and struck a deadly blow on the head of an inoffensive female. In a moment he was as cool as ever, and quite unconcerned, as if he had done no injury to any one.§

Esquirol says, "Some monomaniac homicides, after the act, appear to be relieved of all agitation and distress. They are calm, without regret. They contemplate their victims with a coolness, and sometimes with a sort of satisfaction.||

In the trial of Rogers, Dr. Bell said, "It is a well-settled fact that after paroxysms of violence the insane often appear calm and tranquil."¶ Dr. Ray said, "The calmness of the defendant after the homicidal act is in accordance with general experience."\*\* Dr. Woodward: "The calmness of the defendant after the act coincides with common experience."††

Henrietta Comier, who cut off the child's head and threw it into the street; the teamster who killed four persons and assaulted three others; the woman who killed her mother and three others; the youth who

\* *Malad. Mentales*, p. 60. † *Ibid.*, li. 104.

‡ *Ibid.*, p. 103. § *Trial of Rogers*, p. 165.

|| *Ibid.*, p. 158. ¶ *Ibid.*, p. 161.

\*\* *Ibid.*, p. 160. †† *Ray, Med. Jurisprudence of Insanity*, p. 327.

\* *Malad. Mentales*, li. 832. † P. 160.

‡ *Ray, from Otto, Med. Jurisprud. of Insanity*, p. 219.

§ *Hospital Report*, x. 86. || *Malad. Ment.* li. 105.

¶ *Trial of Rogers*, p. 158. \*\* *Ibid.*, p. 165.

†† *Ibid.*, p. 160.

shot his mother-in-law, and very many others described by Marc, Esquirol, Tuke, Ray, &c., were calm and even indifferent after the commission of their acts of violence.

#### ABSENCE OF MOTIVE.

Some lunatics, who commit homicide or other deeds of violence, have motives for their actions, which they recognize and acknowledge. But these are usually imaginary and out of relation or proportion to the act. They frequently act under delusions, which, if real, would be sufficient reason for their conduct if they were sane. Others act without motives. They feel impelled to their strange conduct by forces which they cannot resist or control. "These," says Esquirol, "act without consciousness, without passion, delusion or motive."\* "Such is the power of this disorder, that persons of the sweetest temper are driven to violate laws the most sacred, and kill those who are the dearest to them. Deprived of reason, they are influenced by no passion and no motive."† He mentions seven cases of this motiveless momentary insanity.

Tuke describes and quotes thirty-one cases of homicide, violence, or propensity, which he arranges in a class, under the descriptive head of "without marked disorder of intellect," and without premeditation and design.‡ Some, like the Suabian teamster before quoted, yield blindly to their excited destructive propensity and attack, injure, or destroy whatever or whoever may be in their way.

#### NO REMORSE AFTER CRIMINAL ACT.

Many of the insane, who commit acts of violence, murder, assaults, &c., under the influence of delusion, paroxysm, or impulse, when they regain their reason, do not feel that they were free agents nor responsible for their conduct at the time, as sane persons are. They may have killed those whom they most loved, wives, husbands, parents, children, and mourn their loss as deeply as they would the same event from any other cause. Yet ordinarily they feel none of the remorse that sane murderers would, none of the bitterness of self-condemnation.

Gall quotes a case of an insane woman who drowned her little son. "She behaved in the most regular manner, expressed the deepest repentance for the act, but did not consider it as a crime."§

Ray says, "The homicidal maniac, after gratifying his bloody desires, testifies neither remorse, nor repentance, nor satisfaction."\* A large part of the insane homicides and incendiaries described by the writers on these topics are said to have shown no remorse; and although they may have confessed the facts, and their agency in them, they did not charge them upon their consciences as sins.

A young incendiary, who had set three fires in a state of mania, was brought to my care. He coolly confessed his agency in these facts, and regretted it, but felt no pang of conscience.

Thus men who are even sensitively conscientious in regard to their conduct in health, commit atrocious acts in their insanity, and afterwards, when reason is restored to them, they charge themselves with no sin for these acts; they feel that they were not then responsible. Their calmness seems to those who do not understand the disease to be hardihood in crime, and is held by them as evidence of guilt, while the psychologist looks upon it as a proof of innocence and irresponsibility.

#### NO CONSCIOUSNESS DURING THE ACT, NOR RECOLLECTION AFTERWARDS.

Among the significant peculiarities connected with the violent acts in the paroxysms of some of the insane are unconsciousness during the act, or outbreak, and forgetfulness or absence of recollection afterwards. In these cases, the mind seems suspended and receives no impression, and, of course, retains none. Referring to the acts of a maniac in his brief paroxysm, in the trial of Rogers, Dr. Woodward said, "the memory of what has occurred is frequently obliterated;"† and Dr. Bell, "in cases of outbreak the impulse is so sudden that the patient is hardly conscious of his acts. It often occurs that after the paroxysm has ceased the patient has little or no recollection of the act itself, though he remembers pretty well what preceded and what followed.‡

The young man who attacked the advocate in the court room of Paris already described, had no consciousness of the act at the time, and no recollection afterwards.

Dr. Laycock, the learned Professor of Medical Psychology in the University of Edinburgh, in a lecture on the legal responsibility of the insane, quoting the case of Bryce, who had killed a person, but had no recollection of it, said, "want of recollec-

\* *Malad. Mentales*, ii. 90.

† *Bucknill and Tuke, Insanity*, 194.

‡ *Works*, i. 298.

† *Ibid.*, p. 162.

\* *Medical Jurisprudence of Insanity*, p. 231.

† *Trial of Rogers*, p. 161.

‡ *Ibid.*, p. 157.

tion is common in homicidal lunatics of a certain class.\*

Dr. Ray, in trial of Rogers, said "where the paroxysm of insanity is very severe and the conduct of the patient very violent, I have generally found a breach of consciousness in his mind. He appears to have lost a portion of time out of his recollection. I have always inquired of patients in regard to the degree of their consciousness, and I cannot think of a single instance where one was conscious of everything during the paroxysm."† Dr. Ray, in his Medical Jurisprudence of Insanity,‡ a work of the highest authority in America and Great Britain, quotes the instance of a girl who, in a paroxysm, was violent, sometimes attempting her own life and sometimes that of her mother. The fit, which, altogether, continued one or two days, being over, she recovered her affection for her mother, and asked her forgiveness. She did not recollect all the circumstances of these fits, and denied, with feelings of surprise and regret, some of the particulars which were related to her."

Castelnau gives several cases of similar forgetfulness of the events of a paroxysm of mania. The shoemaker who suddenly attacked his wife,§ the man in Rue de la Porte d'Alais, in Paris, who was suddenly made insane, and broke his furniture, and abused his wife;|| the woman who grossly insulted her companions in an outbreak,\*\* all these severally had no memory after the restoration, of what they had done in their insane excitement. So also the tailor, whose case he quotes from Marc, De la Folie, ii. 512, who suddenly became insane, and began to overturn furniture and attacked his wife, had the same unconsciousness of his acts at the time, and the same want of recollection the next day.††

Baron Martin, presiding at the trial of Townley, for the murder of Miss Goodwin, at Derby assizes, December, 1863, in his charge to the jury, said, "In one species of insanity, the patient lost his mind altogether, and had nothing left. Such a person would destroy his fellow-creatures as a tiger would his prey, by instinct only; a man in that state had no mind at all, and therefore was not criminally responsible."‡‡

A boy under my care as a patient was ordinarily as quiet as other and sound persons. One night he refused to go to bed at

his usual time and in his usual way. I endeavored to persuade him, and not succeeding, I took his hand to lead him to his chamber. Immediately he broke out in furious rage, and for three quarters of an hour he tried, in all ways and means, to injure me, and the persons and things about him, to bite, strike, kick, scratch, overturn furniture, books, &c. At the end of this time he became quiet, apparently exhausted, and fell asleep in my lap. We then put him to bed. All this time he seemed utterly unconscious, and to be governed merely by instinct. The next day he had no recollection of the events of the evening. He was languid and feeble, as if he had passed through great excitement or labor; but after this, he had no more paroxysms, nor, in the four or five years succeeding, during which I knew of his condition, did he have any further mental disturbance.

#### INSTRUMENTS OF INJURY.

A sane man, whether honest or criminal, when he has an object in view, a purpose which he premeditates and plans to accomplish, usually prepares in advance the means fitted for his object, and obtains the best instruments within his knowledge or reach. The insane, under homicidal delusions or propensities, sometimes make such preparations, and obtain arms, guns, pistols, knives, razors, which they use for their destructive purpose. But when the paroxysm is sudden, and the propensity to kill or injure comes after or with the outbreak, then he seizes whatever may be within his reach at that moment and place.

"The criminal lays his plan for the execution of his designs. Time, place and weapons are all suited to his purpose. The homicidal monomaniac, on the contrary, for the most part, consults none of the usual conveniences of crime. He falls upon the object of his fury, oftentimes, without the most proper means for accomplishing his purpose."§§

One of Dr. Woodward's homicidal patients was standing before his fireplace, by the side of his wife. He was suddenly excited with mania, then took the andiron which was then present, and with it struck his wife a fatal blow.† Another, in the same mental state, took a billet of wood that lay before him, and used it with the same deadly effect.‡

Dr. Ray quotes a case from Georget (*Discours Medico-Legale*, 153) of an epileptic, who, in a paroxysm, ran through the fields;

\* *Journal of Medical Science*, London, x. p. 361.

† *Trial of Rogers*, p. 164.

‡ P. 213.

§ *Annales d'Hygiène et de Médecine Légale*, xiv. p. 222.

|| *Ibid.*, p. 224. \*\* *Ibid.*, p. 226. †† *Ibid.*, p. 223.

‡‡ *Journal Mental Science*, ix. p. 596.

• *Ray's Med. Jurisprudence of Insanity*, p. 232.

† *Worcester Hospital Report*, x. 78.

‡ *Ibid.*, p. 80.

he pelted one man with stones, which he threw at him; he knocked down another by beating him on the head with a large stone in his hand; he attacked a third with a spade which he found in the field, and a fourth with stones.\*

Esquirol gives account of a woman who killed her child, stabbing it twenty-one times with scissors.†

Castelnau speaks of one who did a similar work with a pocket-knife.‡

An epileptic patient under my care, was disposed to fight in his sudden outbreaks. Then he would use whatever means happened to be before him. In the house he took up books, chairs, inkstands. When walking in the fields with his attendant, he took up stones to throw at him, and once he used them as mallets in his hands to beat his companion.

(To be continued.)

#### THE PHYSIOLOGICAL AND THERAPEUTIC RELATIONSHIPS OF ERGOT OF RYE.\*

A Thesis for the Degree of Doctor of Medicine; and to which was awarded the First Prize of the Boylston Medical Society for 1908.

By FRANK W. DRAPER, M.D.

(Continued from page 312.)

It concerns us now, from this review of the physiological symptoms of the action of spurred rye, to draw some inferences concerning its *modus operandi* in the system. On this deeply interesting question many and very varied opinions have been expressed, each observer arriving at conclusions oftentimes quite at variance with those of his predecessor. Thus the earliest authors claimed that all the effects of ergot, whether manifested in the uterine or in the nervous systems, were due to the presence of a poison in the blood, and to the efforts to eliminate it. Wright classes the drug as a "narcotico-acrid" agent, whose effects are due to its secondary depressing or sedative influence. Certain French authorities, of acknowledged repute, regard it as a stimulant and excitant, and illustrate their theory thus:—"If, under the influence of ergot, feeling and motion are observed to return to limbs previously paralyzed, we should not be inclined to call in question its power as a stimulant on the spinal cord." (*Bibliothèque du Méd. Pract.* p. 230.) Parola and the Italian school of observers insist that the varied physiological and therapeutic effects may all be referred to a general hyposthenic influence on the whole

circulatory system, and make it the analogue of bloodletting and tartarized antimony. Thus, in parturition, ergot favors uterine contraction by acting on the engorged vessels of the uterus; these vessels having been depressed by the "hyposthenic" action of ergot, the organ is no longer confined by their state of excessive congestion, and can contract freely and accomplish its function. Again, Headland, an authority of universally acknowledged weight, says of this agent that "it is a stimulant to the muscular nerves of the uterus of the female, but to no other nerves in marked degree"; and, in another connection, when speaking of its effects in an overdose to produce "sometimes syncope, and sometimes narcotism," he says, "this is not the office for which it is employed, and is altogether distinct from its operation as a special stimulant, which is exerted only on the ganglionic nerves of the muscular uterus." In small doses it produces no other effect, and thus its action is purely and wholly local in its nature.—(Action of Medicines, p. 262.) So late as 1863, a writer in one of the British medical journals claimed that the specific action of spurred rye in producing uterine contractions was due to its nauseant effect; and he had observed that other depressant emetics, as tartarized antimony and ipecac, produced similar results, while, on the other hand, in cases where vomiting was absent after the administration of ergot, the uterine inertia remained *in statu quo*. Within the past year, a contributor to the *American Journal of the Medical Sciences* has urged ergot as an efficacious remedy in neuralgia, basing his theory on the premise that the physiological effect of the *sécale cornutum* was to stimulate the vaso-motor nerves; and presuming neuralgia to consist of a disordered nutrition, "a cry of the nerve for healthy blood," the existing condition would be thus effectually counteracted.

But on a careful analysis of the various symptoms which follow the exhibition of ergot, it does not appear that any of these theories offer a full and satisfactory explanation of all the phenomena. Each one has its features of apparent plausibility, but when applied to the test of a systematic analysis of the phenomena produced, it is found to be wanting in essential points. But it seems to have been reserved for our own day, and we may almost say, for our own country, to witness the discovery of the true mode of action of ergot, and to Prof. Brown-Séquard belongs the distinction of first clearly demonstrating the theory

\* *Med. Jurisprud. Ins.*, p. 209.

† *Malad. Ment.* i. p. 231. ‡ *Ann. Hyg.*, xlv. p. 439.

which satisfactorily accounts for all the varied, and sometimes apparently heterogeneous, physiological and therapeutical powers. His view may be presented in the following proposition:—*Ergot is a special stimulant of the unstriated or involuntary muscular fibre wherever it is found.*

Before discussing the truth of this proposition, it may be well to look for a moment at the nature and distribution of the anatomical tissue, the muscular fibre of organic life, which is said to play so important a part in the action of ergot on the economy. According to Wilson (*Human Anatomy*, p. 171) "the ultimate fibre of organic life or smooth muscular fibre, is a single homogeneous filament, much smaller than the fibre of animal life, flat, smooth, and without transverse striæ. It is distributed abundantly in the animal frame, and is met with where a distinct contractile power, independent of mere elasticity, is required; as follows:—in the alimentary canal, from the middle of the œsophagus to the internal sphincter ani; in the posterior segment of the trachea, and in the bronchial tubes to their finest ramifications; in the excretory ducts of the various glands; in the ureters, bladder, and urethra; in the uterus, vagina and Fallopian tubes; in the middle coat of the arteries, veins, and lymphatic vessels; in the iris and in the corium of the skin."

Here, then, we have a tissue endowed with contractile power to a high degree, and distributed very generally through the system. Any agent possessing the power of affecting this in any degree must create, directly or indirectly, symptoms in great number and diversity, and in endeavoring to apply the test to ergot, to draw the analogy between the various phenomena presented by the artificial influence of this agent, and those consequent on certain pathological conditions, we are bewildered by many collateral questions which seem to extend investigations indefinitely. We can only examine briefly some of the more evident relations, and attempt to analyze the phenomena of the action of ergot on the system in their application to the proposition of its general physiological action.

If a proper dose of *secale cornutum* be taken, it is absorbed and enters the blood directly; with that fluid it circulates to all parts, reaching in its course every organ, and extending its influence to the smallest artery. These minute vessels contain, as their middle coat, a layer of organic muscular fibre, readily obnoxious to stimuli. The first and more obvious effect of stimulation of the circular fibres, is a contraction

and diminution of the calibre of the vessel. Virchow has shown that this contraction may, under certain circumstances, proceed until the canal is almost entirely obliterated. (*Cellular Pathology*, p. 147.) The legitimate consequence of this is, necessarily, a temporary anæmia. Now ergot, presenting itself throughout the body, to all the arterial ramifications, performs, through its active principal, this stimulant function. This action, with its resultant effects, has been demonstrated by experiments on animals, Brown-Séquard having "repeatedly seen the diminution of the calibre of the blood-vessels of the pia mater of the spinal cord, taking place in dogs after they had taken large doses of ergot. (*Braithwaite's Rel.* 1861, p. 89.)

In view of this theory of general anæmia as one effect of ergot, it becomes an important question to determine what becomes of the blood in such cases, its total quantity remaining the same in the body. There is but one apparent reservoir for this back flow, and that is found in situations where the muscular fibre is less abundant, and hence a venous congestion results. Wright includes among his observations, reports of *post-mortem* appearances in animals dead from the effects of ergot, and in these he says of the condition of the lungs, that "they were much darker than usual, and their surface exhibited various ecchymoses, not the consequence of gravitation from position, but apparently resulting from stagnation of the blood during life." (*Op. cit.*) The heart, too, in these instances was generally found distended with blood. In support of this proposition, also, the fact is stated that in fatal cases of ergotism, "the parenchymatous organs were found congested." (*Stillé—Op. cit.* p. 588.)

Of the physical appearances depending on the anæmia of ergotism, perhaps the most obvious is the general pallor or lividity of surface which various authors have noticed as a constant symptom. This, of course, offers the most apparent external indication of the diminished supply of blood to the surface, and, as an almost necessary concomitant, a diminution of the temperature has been observed in many cases, both in man and in animals.

In the brain, the anæmia of ergotism gives rise to symptoms so exactly analogous with those of cerebral anæmia, when recognized as a pathological condition, that it will be interesting to enumerate and compare them, as reported in each case by different authors. Gubler notes the following among the signs of acute ergotism; depend-

ing, as he says, on "the sole property of ergot to convulse the contractile elements:" nausea and vomiting, numbness, lassitude, heaviness of the head, vertigo, dilatation of the pupils, delirium, stupor, sedation of the circulation" (Op. cit. p. 113). Assymptoms, on the other hand, of cerebral anæmia, whether depending on the general constitutional condition, or produced artificially by compression of the carotids, hæmorrhage or otherwise, Handfield Jones recognized "loss of consciousness, dilated pupil, vomiting, dizziness, swooning and coma, with depression of the circulation." (Functional Nervous Disorders, p. 48.) This comparison shows such an obvious similarity as to readily suggest the necessary inference.

The sedation to the circulation, which at first view might appear susceptible of an explanation on mechanical grounds, or perhaps by the direct action of ergot on the inorganic muscular elements of the heart, or indirectly by the temporary compromise of its nutrition, is fully accounted for by the anæmia of the brain, which seems to produce this derangement of the circulation as a constant symptom, analogous with that caused by sudden shock, excessive hæmorrhage and other such conditions.

Upon the spinal cord, also, the effects are no less decided, while the analogy, pointed out above in the case of the brain, is equally obvious. Handfield Jones (Op. cit. p. 61) records, as the result of ligation of the aorta in animals, a slowness of respiration and gradually developed, and, finally, complete paraplegia. Convulsions were the exception, thus establishing a distinction between anæmia of the cord and that of the brain. This condition of the cord is deemed by this author a rare affection, and only a single case is cited. In this, the patient was seized with numbness running down the legs, and with retention of urine. To this there soon succeeded a paralysis of the lower extremities, involving both motion and sensation. Consciousness was perfect. Under tonic treatment, this condition shortly yielded, and in a little more than a month the patient was well.

Among the effects of the cumulative action of spurred rye on animals, Wright found that one of the most constant was a weakness of the hinder extremities, soon developing into paralysis. This condition, taken in connection with the diminished respiration which has been repeatedly remarked, suggests at once a similarity with the functional state just noticed. It is true that in the human system the cumulative

influence of ergot has not been observed to produce these grave symptoms of impaired nervous power, but it would seem that an approximation to that state is found in the numbness and itching of the skin which have been recorded as symptoms of ergotism.

The power of ergot to directly stimulate, and to contract the muscular fibre of the intestines and of the trachea and bronchial tubes, is at best a question for further investigation. No special experiments appear to have been made in this direction. There are, however, a few detached phenomena which seem to afford some light in the matter; for example, Wright, in his numerous experiments, repeatedly observed in animals, dead from ergot, distinct contractions encircling the intestines like bands, while the general calibre was markedly diminished. The "abdominal pains and alvine evacuations" mentioned by Gubler as among the effects of ergotism, point also to the increased muscular action in the intestine, by which the normal vermicular motion is exaggerated. The dilatation of the pupils may be due both to the direct effect of the drug on the involuntary muscle which composes the curtain of the iris and to the anæmic condition of the brain, as remarked upon before. Again, the state called "goose-flesh," often seen in ergotism, may perhaps be attributed to the stimulation of the delicate involuntary muscles, the *erectores pilorum*, which lie imbedded in the corium, causing a condition like that from the impression of cold.

The effect of ergot on the uterus was the influence which first procured for that agent a place in the *materia medica* as a remedial agent of the first order. Its power to originate uterine contractions, as well as to intensify those already commenced, is too well known and too generally recognized to need elaborate vindication.

The phenomena of this effect are well defined by Gubler as follows:—"The uterus being the seat of election of the action of ergot, if the organ is gravid, tonic contractions, more or less marked and prolonged, are induced, under the influence of which the viscus assumes a very decided hardness and a globular form, like the condition during the spontaneous pains of labor. These spasms, artificially produced, are like the intermittent normal contractions accompanied by painful sensations, known as uterine colic. They are sufficiently powerful to hasten the expulsion of the fœtus. Besides pregnancy, and the hypertrophy of its contractile tissue, the

uterus feels the influence of ergot proportionally to the development of its special muscular apparatus. This effect is seen in the hypogastric pains and by the discharge of blood, as well as by the suspension of metrorrhagia." (Op. cit. p. 113.) The nature of this action is composite. If the uterus is in its normal, unimpregnated state, its tissue is composed of the unstriped muscle largely supplied with bloodvessels. This special anatomical structure is emphatically exaggerated when the organ is undergoing its peculiar functional changes in pregnancy; the muscular substance is then greatly hypertrophied, while the circulatory apparatus is proportionally augmented. Such a condition renders the uterus, which at any time attracts to itself the elective action of ergot, more readily susceptible to its influence, the special effect manifesting itself alike on the smooth fibres of the uterine walls, and on the smooth fibres of the contained bloodvessels, on identically the same principle.

A series of symptoms, which together characterize an epidemic affection almost unknown in this country, but common enough on the continent of Europe, still further illustrates the cumulative effects of ergot. From the time when, at the close of the eleventh century, Siebert de Gremblour first recognized the cause of this disease and described its symptoms, until the present, ergotism has been identified as the legitimate consequence of the continued use of the diseased rye as an article of diet. The uniformly devastating effects of this ergotized diet have been repeatedly recorded; whole districts have been infected as by a pestilence, armies have been decimated, the sexes have suffered alike, and in every case the cause was attributed to the diseased rye. The symptoms of this peculiar, and, in general, fatal affection are so characteristic and so clearly exemplify the legitimate physiological effect when carried to its extreme degree, that we can do no better than to transcribe two cases illustrating the two recognized varieties of ergotism, the spasmodic and the gangrenous. "In 1841, a family of eight persons lived upon heavily ergotized rye-bread, the grain having been gathered during the preceding wet season. The chief symptoms consequent were these:—Malaise, anxiety, exhaustion, fainting, coldness of the whole body, a sharp, pricking pain and formication, numbness of the hands and afterwards of the arms, alternating with spasms so severe as to extort tears. The muscles of the lower extremities were affected in the same manner, and, in one

case, those of the right side of the face, and, subsequently, those of the abdomen were spasmodically contracted. About the sixth day, nausea, vomiting and diarrhoea took place, with severe pains in the bowels and bladder. At the fourteenth day, two of the children lay as if stupefied, or, if roused, raved wildly or complained of pain in the head and limbs. At the same time, a pruriginous eruption appeared on the skin. They died, on the twenty-first day, in violent convulsions. The other case is reported by Bonjean. Like the former, the family consisted of eight persons. Of these, four were not affected, two but slightly so, and of the other two, one perished and one lost his leg. All of them had lived on the same bread. In the fatal case, the symptoms were these:—pain in the groin, a dark spot on both calves, coldness and pain in the legs, followed by an eruption of vesicles, with violent itching, and, finally, gangrene of the lower third of the legs. The upper part of the legs was affected with humid gangrene. Both legs were amputated below the knee, with little loss of blood. No extension of the disease followed, but the patient died of pneumonia, which was probably metastatic. In the other child, but one leg was affected; its symptoms were the same as in the first case, but spontaneous separation of the limb took place at the knee, and recovery followed. (Stillé's Therapeutics, vol. ii. p. 589.)

So clearly allied is this train of symptoms with the phenomena of the action of ergot, experimentally demonstrated, that it is obviously but the exaggeration and culmination of those phenomena on the principle already stated—the power to contract the involuntary muscles. For example, the fatal gangrene which constitutes so important a feature, is but the necessary effect of the continued sedation to the circulation, in parts distant from the heart, and depends on the prolonged diminution of the calibre of the vessels. In this respect it resembles precisely the well recognized effects of cold, the compromise of the circulation resulting in a lesion of nutrition and a consequent death of the part, without inflammatory changes. So, again, the cramps, the convulsions, the coma, the formication, the abdominal symptoms and the coldness and numbness, illustrate in the most emphatic way the various phases which characterize the action of ergot on its proper underlying principle, and were there no other facts at hand, these phenomena would serve to demonstrate the theory that "however numerous and various these effects, they can,

nevertheless, be all referred to the fundamental action of ergot upon the nuclear fibres, and in general on the fibres or even the contractile granules of organic life." (Gubler.)

From this survey of the physiological action of ergot, one or two considerations must be evident almost at the outset. Upon the principle that this agent is a special stimulant of the involuntary muscular fibre, it may be properly asked why we do not observe, in its ordinary use, phenomena characteristic of its general constitutional effect; if its powers are so great to contract fibre in one part, why is its action limited or neutral in others equally well supplied with involuntary muscle; if the uterus and the vessels of the spinal cord are readily acted on, why do we fail to detect equivalent effects at the same time in the bladder, the intestines, the iris, the œsophagus? Without admitting that the action of spurred rye is so absolutely limited, or that all the involuntary muscle in every part fails to feel in some degree the effect in any case, it must be confessed that the action is elective in very considerable measure. It has been recognized from the earliest times in the history of ergot, that the uterus was especially sensitive to its impressions, and hence its traditional synonyms:—*mutterkorn*, *pulvis partum accelerans*, *pulvis parturificans*. The reason of this partiality is found in the accepted dogma of elective affinity in medicinal agents—the special power of affecting certain parts or organs to the exclusion, partially or wholly, of others. Just as certain cathartics select, for their field of action, their own appropriate portions of the intestinal tract, to the exclusion of the rest; just as strychnia manifests its peculiar power through the spinal cord, leaving other portions of the nervous system; just as diuretics owe their special effects to their special attraction toward the renal apparatus in the process of elimination; so ergot exhibits its action by selecting its own proper field. The reason why, in epidemic ergotism, in the same season, and under similar conditions, different individuals are differently affected, one exhibiting all the symptoms of spasmodic ergotism, and another those of the gangrenous type, must be sought for in individual idiosyncrasy and aptitude for special tendencies.

The obvious analogy between the theoretical action of ergot and that of the class of drugs called astringents, would seem to indicate that the latter should include the former. Indeed, according to the theory

stated, there appears an almost absolute identity of action. But the difference lies in this. "Astringents," according to Headland, "act directly and especially on muscular fibre, causing it to contract, whether it be striped or voluntary, or of the unstriped and involuntary kind. This depends on their chemical power to coagulate albumen, and from this they derive their dynamical power over living tissues." But this power to coagulate albumen does not reside in ergot, nor does it appear to exert any influence over the voluntary muscular fibre. In these two important respects, then, ergot seems removed from the class of general astringents, while it may claim to be considered as a special astringent, whose powers are of a peculiar nature.

[To be continued.]

#### A CASE OF HERPES ZOSTER OPHTHALMICUS, IN A PATIENT 80 YEARS OF AGE, CAUSING FATAL PROSTRATION; WITH REMARKS.

By B. JOY JEFFRIES, A.M., M.D., Ophthalmic Surgeon  
Mass. Char. Eye and Ear Infirmary, Boston, &c. &c.

(Concluded from page 319.)

SEVERAL cases have lately been reported where paralysis accompanied herpes zoster. Dr. F. B. Greenough, Boston Medical and Surgical Journal, p. 401, 1868; Dr. Albion Cobb, same Journal, p. 95, 1869; Mr. B. J. Vernon, *St. Bartholomew's Hospital Reports*, vol. iv., 1862, and Dr. John Duncan, Oct., 1868, *Journal of Cutaneous Medicine*. This has occurred too often to be treated as a mere coincidence, and must be taken in due consideration in the study of the pathology of this disease. Hutchinson's remark seems to grow more and more applicable, "that whoever succeeds in unravelling the mystery which at present surrounds it must at the same time make a discovery in physiology."

Dr. Edward Woakes, in the *Journal of Cutaneous Medicine* for October, 1867, published some remarks on the correlation of cutaneous exanthemata with neuralgia, analyzing Mr. Paget's observations, and those of our countrymen, Drs. Mitchell, Moorhouse and Keen, on wounded nerves. His theory, as applicable both to the traumatic and idiopathic forms of this disease, is—"that, owing to the suspension of the regulating power exercised mainly by the sympathetic nerves over a given artery, effusion takes place from its ultimate ramifications. These being distributed to the skin on the one hand, and to the texture of the

sensory nerves on the other, the effusion so caused produces the herpetic rash in the former, and pain from mechanical pressure in the latter." This theory, as explained in his article, is certainly a very plausible one, and best harmonizes with the results of observations. All theory, however, in reference to herpes zoster, whether traumatic or idiopathic, is at present perhaps premature, and any one founded on a few cases seen in the practice of a single individual, is most likely to be subsequently disproved. Herpes zoster still remains a nosological riddle.

In regard to the special form of *ophthalmic herpes zoster*, if we may draw conclusions from the above table of thirty-four and the other cases reported, we can say that it may affect the frontal branch alone, or the frontal with one or more of the others. It does not seem to affect the other branches *without* the frontal. The eye is not affected when the frontal alone is involved. The danger to this latter organ is very great, as it has at times been destroyed or useful vision taken from it. Mr. Hutchinson says:—"I have seen several cases in which the cornea, sclerotic and iris became involved in inflammation. As a rule, I think the eye does not inflame until the eruption is at its height or already beginning to decline. In one case, however, a single nodule of lymph near to the pupillary edge showed itself in the early stage, and without any ulceration of the cornea. More usually the ulceration of the cornea is extensive, and often it prevents a satisfactory inspection of the state of the iris. There is always great congestion, both of conjunctiva and sclerotic, and this congestion, as well as the corneal ulceration, is very slow in disappearance. The pupil, even when there is not much lymph visible, is always very sluggish, and in several cases I have found it impossible to make the iris act by atropine, even by strong solutions frequently repeated. I have never seen hypopyon in connection with this form of ophthalmia, nor does the other eye seem to suffer. According to my experience, herpes zoster frontalis is more frequent in the aged than in the young, and also more severe. The liability of the eye to suffer also appears to be much greater in the old." "When the disease has subsided, the eyeball is usually left somewhat anæsthetic, though perhaps at the same time liable to neuralgic irritability. In this it shares with the skin, which, although perhaps very painful, is always numb as regards common sensation. In the after stages the patients often com-

plain that the skin feels 'numb and stiff like parchment.'" Mr. Bowman says:—"It is not always possible to examine the eye accurately during the herpetic attack, owing to the swelling of the lids; but when this subsides, it is usually easy to ascertain what tissues have suffered. I have seen nothing like herpetic eruption on the conjunctival surface of the lids or globe. The conjunctiva may be too red, the eye may be watery and intolerant of light, and the peculiar pain of the affection may be experienced in, or referred to, the organ itself; but usually there is no primary disease, such as corneal or iritic inflammation, coincident with, or forming a part of the eruptive stage of the complaint. If these occur, they seem rather to follow after a short interval. Small softening or ulcerations of the cornea, rather marginal than central, and slight iritis, are the more common complications, but rather the former than the latter; and they have seemed to me to bear considerable resemblance to those following smallpox, both in their course and the treatment they demand."

I avoid further speculation on this form of the disease in our present knowledge of it. Mr. Hutchinson says:—"There can be little doubt that the local processes of inflammation in the skin and the eye are produced directly through the medium of the nerve, in this instance, of the ophthalmic division of the fifth (some or all its branches). At what part of the nervous system the irritation begins, however, we are quite in the dark. I can see no argument in favor of the belief that it is produced by the vaso-motor rather than by the sensory trunks. It appears always to follow accurately the distribution of the latter." "This singling out of one particular nerve-branch might seem to imply that the irritation, whatever it is, attacks the nerve-trunks after their subdivision. It is possible that it may be brought to bear upon them through the medium of the vaso-motor ganglia. This conjecture is very different from the one which would attribute the whole production and localization of the disease to vaso-motor filaments. Other arguments might be held to support the conjecture that the irritation starts from the cerebral ganglia of origin for the nerve concerned." "I must beg to warn against hasty inference, from the fact that sometimes only one branch of the ophthalmic nerve, and sometimes all are affected; that it is therefore probable that the disease commences in the nerve-trunks after subdivision, rather than in the cerebral or ganglionic centres com-

mon to them all. Such an inference is surely most unfounded. The nerve tubules which are to be distributed, as the 'frontal nerve,' for instance, are just as distinct from those constituting the nasal branch, when they are bound up in one bundle and called collectively the 'ophthalmic nerve,' as they are subsequently, when divided. There can be little doubt that, whatever may be their mutual relations for convenience of transit, they are perfectly distinct from one another from beginning to end. It is therefore easily comprehensible that a source of irritation, beginning either in the Gasserian ganglion or in the mesocephale itself, may be restricted in its influence to one branch only."

Dr. M. Singer records a case of herpes zoster following all three branches of the fifth, and in which it was observed that the two senses of touch and taste in the tongue disappeared and reappeared in strict unison, thus giving strong corroboration to the idea that the lingual is a nerve of taste. (*Biennial Retrospect of Medicine.*)

Dr. P. Gerhardt says that the group of diseases in the course of which zoster facialis is frequently observed is distinguished by the frequency of the initial rigor, or the occurrence of an increase of temperature to 30° Réaumur (104 F.) even on the first day. Gerhardt remarks that this affection does not attack the trunk or limbs, but only the face, and thinks that the irritation must be caused by the following peculiarity of the fifth nerve. The branches of this nerve run through narrow, long canals, along with small arteries; these arteries contract in the initial rigor, but then dilate, and their abnormal size creates a pressure on the branches of the trigeminus and the sympathetic. The occasional result of the damage to the latter is the occurrence of a vesicular eruption on the skin. He thinks that when this has once occurred an accommodation takes place, in virtue of which a second attack of febrile dilatation of the vessels does not irritate the vaso-motor fibres so as to cause the eruption. (*Biennial Retrospect of Medicine.*)

As regards treatment, Mr. Hutchinson says:—"Whilst our pathology is so uncertain, we can allege nothing with confidence. I have always been in the habit of ordering quinine, and using any simple local application which may seem most appropriate to the stage of the eruption. Lead lotion at first, or free applications of oil, or, if the pain be very severe, of laudanum, are all useful." Mr. Bowman says:—"I wish I

could state anything very satisfactory as to the treatment of the after-pains, which are sometimes so severe as to make the patient weary of existence. In Case IV., subcutaneous division of the nerve was only undertaken after almost all other remedies, local and general, had failed. It certainly for a time took away all feeling from the region to which the frontal nerve is distributed, and when touched in this region the patient no longer experienced the pains which previously tormented him. But in a few weeks the sensibility had returned, and even at first the pains in the neighboring parts to which the remedy had not extended seemed such as to make the partial relief very little appreciated. It may be also that the morbid condition of the nerve on which the pain depended was not confined to the part peripheral of the point of section, and that the central portion continued the seat of pain. Perhaps if it had been possible to divide the nerve further back, the relief would have been greater."

"In Case VI., very marked relief did follow section of the nerve, and with clear evidence of the fact. When the frontal nerve was divided, the frontal pain was greatly lessened. When the external nasal branch was cut, pain was no longer referred to the skin of the nose, while the inner surface of the nostril continued to be the seat of distressing pain, and I could think of no way of dividing the inner branch entering the nostril far back through the ethmoid. The relief, so far as it extended, was in this case so permanent and considerable as constantly to elicit the patient's thanks. The result in this case would incline me to recommend the division of the nerve, a very harmless proceeding under chloroform, whenever the after-pains are severe and continuous in spite of time and other treatment."

In the case I have related, as I have above said, division of the frontal nerve would not have been of special service till pain had left the parts supplied by the other branches of the ophthalmic, namely, upper lid, side of nose and eye. This it did not do till after the fourth week of the disease, when any operative interference would not have been tolerated by the patient."

Dr. Crépinel reports that he has found great benefit in the treatment of neuralgia in herpes zoster from the local application of chloroform and oil (one part to five), some five or six times daily. The proportion of chloroform to be increased when the pain is very severe; the remedy to be applied as early as possible in the disease.

I will finish with the following quotation from the *British Medical Journal*, vol. i., 1866, p. 470, as it applies to two cases in Mr. Hutchinson's table and to the plate published by the Sydenham Society:—

"A few months ago, at a meeting of the Council of the New Sydenham Society, the new plates of the series of skin diseases were presented to the Council for approval. One of these plates, representing a specimen of herpes zoster of the head and face, excited a little amusement among some of the members. 'Who had ever seen the disease in such a part? Surely it was unnecessary to depict so rare and far-fetched a complaint.' Curiously enough, one of the Council, Dr. Markham, who had had his joke on the occasion, was himself last week pronounced, by his friend Dr. Stewart (another of the unbelieving ones), to be 'a splendid specimen of that very disease we were joking about a few months ago at the Council of the Sydenham Society.' Herpes zoster of the head and face is, however, no joke to the patient. A man need wish his worst enemy no worse week's or fourteen days' excitement than that of an attack by it. In the present case the disease was limited to the course of distribution of the left supra-orbital nerve, and showed, throughout, its distinctive nerve character. Five days before the eruption appeared there was constant neuralgia of the aforesaid nerve and hemicrania. Considerable itching and several hardish and painful subcutaneous elevations preceded the vesicular eruption. The eruption was markedly limited to the left side of the forehead and head and the root of the nose, and to the left upper eyelid."

I have given this somewhat lengthy compilation in regard to herpes zoster, and especially the ophthalmic form of it, partly in defence of my diagnosis of the case I record, but principally as it interested me in the two specialties I practise. I desired, also, to call the attention of the profession to it and prevent its being, as has no doubt occurred, mistaken for erysipelas. I regret my case could not be recorded in more detail; I think, however, it is sufficiently so to establish its identity. In reporting the case at the Suffolk District Medical Society, Boston, and the American Ophthalmological Society at Newport, I exhibited plates from Mr. Erasmus Wilson's series and portraits from Drs. Boeck and Danielssen, Prof. F. Hebra, the New Sydenham Society, and Bärensprung and Hebra's Atlas, wood-cuts and photographs in the Ophthalmic Hospital Reports, and Reports of

the Charity Hospital of Berlin, and would refer to them. I append a list of the journal articles and monographs I have spoken of in the course of this paper.

- Considerations sur le zona. Parrot. Paris, 1857.  
Fenger. *Canst. Jahr.*, vol. iii., p. 143. Abortive Treatment of Zona.  
Forget. *Br. Med. Journal*, Nov. 30, 1861. On Treatment of Zona.  
Von Bärensprung. *Annalen der Charité Krakenhauses zu Berlin*, vol. ix., vol. x., vol. xi. 1861-63.  
J. Russell. *Med. Times and Gazette*, Oct. 29, 1864. Pemphigus and Zona.  
J. Hutchinson. *Ophth. Hosp. Rep.*, vol. v., and *London Hosp. Rep.*, vol. iii., 1866. Dublin Quarterly, Nov., 1867.  
Bowman. *Ophth. Hosp. Rep.*, vol. vi.  
Pundschu. *Singer. Crépeneil. Gerhardt. Schmidt's Jahrb.*, 127, 128.  
J. Hutchinson. *Medical Times and Gazette*, Oct. 19, 1867, p. 432. "Several interesting cases of herpes on forehead have been recently under care." Royal London Ophthalmic Hospital Reports.  
Annual Report of the Netherlands Ophthalmic Hospital. P. C. Donders. 1863-66.  
J. J. Maas. Two Cases Herpes Zoster Ophthalmicus.  
B. J. Vernon, in St. Bartholomew's Hospital Reports, vol. iv., p. 121. 1868.  
The Journal of Cutaneous Medicine, vol. i., p. 49; vol. i., p. 308; vol. i., p. 279; vol. ii., p. 241; vol. iii., 1867.  
Dr. Moore, of Dublin, in *Medical Press and Circular*.  
Tilbury Fox. *Skin Diseases*, p. 110. London, 1864.  
Dr. A. Proust. *Archives Générales de Médecine*, Feb., 1859, p. 225.  
Boston Medical and Surgical Journal, p. 401, 1868, p. 95, 1869.  
Medical Times and Gazette, April 1, 1865.  
L'Union Médicale, Jan. 17, 1861.  
Eulenbergh. *Frag. Vierteljahr.*, i., 1866.  
Paget. *Medical Times and Gazette*, March 26, 1864.

## Bibliographical Notices.

*On Long, Short, and Weak Sight, and their Treatment by the Scientific Use of Spectacles.* By J. SOERLBERG WELLS, Professor of Ophthalmology in King's College, London, &c. Philadelphia: Lindsay and Blakiston. 1869.

THIS is a third and enlarged edition of a work first published several years since. It is in great measure comprehended in the larger work on diseases of the eye by the same author, already reviewed for this JOURNAL. Further comment is unnecessary, except perhaps an allusion to the exquisite typography of the book itself.

"I have already insisted," says Mr. Wells, "upon the necessity of the surgeon himself determining the number of the glass which the patient is to wear, and not entrusting this to the optician." This is the text on which the work before us is an extended comment, the proposition of which it is the demonstration. On no portion of the medical field is quackery more rampant or its results more apparent. Peddlers of

spectacles infest country towns; and city newspapers display unblushing advertisements of glasses warranted to suit any sight, and to last twenty-five or more years. Books like the present are the best means of staying the progress of such rascality, and modifying the credulity on which it feeds.

H. D.

## Medical and Surgical Journal.

BOSTON: THURSDAY, JUNE 10, 1869.

### RAPID CHANGE OF COLOR IN HUMAN HAIRS.\*

DR. BROWN-SÉQUARD, in the last number of his *Archives de Physiologie*, gives an account of a rapid change of color—from black to white—which took place in the hairs upon the face of the *savant* himself.

In the month of August, 1862, he began to notice the appearance of a few white hairs in the anterior portion of the beard covering the middle of both cheeks. The posterior portion had, already, for several years been sprinkled with gray, the anterior half remaining untouched. In this anterior portion, he, on rising one morning, found a few white hairs, which he extirpated. Two days after, in the midst of hairs which were black, or dark brown, in their entire length, with a few others which were white only near their roots, he found three hairs which were white in their entire length on the right cheek, and two on the left.

To make sure that he had not been mistaken, he followed up his observations on several occasions for six or seven weeks; and after each extirpation he saw black hairs become white throughout their entire length in the course of from two to five days. He remarks that it is scarcely necessary to say that, during the same period, a number of hairs began to whiten in the neighborhood of their roots.

Dr. Brown-Séquard was then in his ordinary state of health, and was not under any extraordinary mental influences. Thus, without any appreciable cause, he says,

\* *Poils* is the word used, meaning hair other than that which grows upon the scalp.

than that which at a certain age makes the beard turn white, there took place in his case, a very rapid change of color, from black to white, in a considerable number of the hairs upon his face. As far as he could ascertain, this change occurred always in the night. He did not examine the whitened hairs with the microscope.

He concludes that this experience of his puts beyond a doubt the possibility of a very rapid transformation (probably in less than a night) of black hairs into white. He, however, considers that the statements on record of a sudden blanching of a considerable portion—greater or less—of the hair or beard do not rest on a basis of scientific authority.

In one of last year's numbers of the *Archives de Physiologie*, we have been shown an article by Dr. Brown-Séquard on the subject of the immediate arrest of convulsions of the lower limbs, by the irritation of certain sensitive nerves. The Doctor had observed seven cases in which convulsions had been stopped by the means here indicated. The process consisted in simply flexing suddenly and with a good deal of force the great toe upon the foot. The first of his cases was a violent one. The cessation was prompt upon the application of the remedy, and lasted long enough for the patient to be dressed. This patient was seen in consultation by Nélaton and Trouseau, who witnessed the phenomenon. In some of the other cases the arrest of spasm was not so immediate or so complete; but in all seven there was at least considerable diminution of convulsive action, and that diminution was sufficiently prompt. Dr. Brown-Séquard makes some physiological reflections on these facts.

CONNECTICUT, May, 1869.

MR. EDITOR:—I send you an extract from the "*British Medical Journal*," "being the Journal of the British Medical Association," for publication in the BOSTON MEDICAL AND SURGICAL JOURNAL. It concerns the condition and position of our medical brethren in our Navy. I have recently been very intimate with two of them, very fine fellows, who feel that their state on board ship is little better than slavery. Doubtless you

have seen the statements which they have recently put forth.\* One of the above to whom I have referred, and who is quite active in bringing the matter before Congress and the community, has just been displaced from a ship lying in our harbor on home duty, and sent to sea—a proceeding almost unknown in the Navy. But I have time only to say that the Surgeons of the Navy are anxious that the community should understand how much the service is likely to suffer from the withdrawal of the best talent in the Navy, and also to influence the minds of members of Congress, so that if the subject should come up again, they may be able to act understandingly. I am sorry Admiral Porter is said to be the prime mover in this injustice towards our profession.

SENEX.

[From the British Medical Journal, April 3d, 1869.]

"The Naval Medical Service of the United States.—From papers received by a member of our Association, we learn that there is urgent necessity for reform, in the Medical Department of the United States Navy. "*Unclum non antium mutant, qui trans mare currunt.*" Combatant officers, all the world over, appear to be unduly jealous of the prerogative of command, and they repress the civilians associated with them, as a result of this unworthy feeling. It is evident that the matter is not viewed by them dispassionately, in consequence of the judgment being clouded by feeling. Usurpation of command on the part of civilian officers is impossible, and the commander knows and feels that he may hang any man, or officer, on board his ship at his own will and command, despite consequences, *for he possesses the power.* We should imagine that this reflection would be consolatory to the combatant class, and would enable them to repose majestically in the consciousness of power, without resorting to vexatious and petty acts of restriction. The surgeons of the United States Navy are also dissatisfied, and, we think, justly so, with the treatment accorded to them by their Government; for, at the conclusion of the civil war, they were left unrewarded for their exertions (which were acknowledged to be valuable), whilst promotion and appointments were bestowed on the executive class. Patriotic feelings induce surgeons to serve their country during periods of war; but in time of peace there is disinclination for service, arising out of similar causes in both the American and British navies:—namely, neglect and re-

pression of the civil element of the service. As an illustration of this statement, it may be mentioned, that, in the year 1864, when the demand for medical men was at its height, "one hundred and thirty-two physicians declined appointments in the Medical Department of the Navy, alleging that they were willing to serve, as a matter of principle, or duty, during the war, but desired no permanent place in the navy." This is an unmistakable *pronunciamento* of the profession against the regulations and usages under which doctors are constrained to live, when employed in the sea-service; and, since at the present time there are fifty vacancies, notwithstanding ample opportunity of admission by means of an examining board in perpetual session, we may conclude that some radical change is necessary to maintain the efficiency of the United States Navy in time of peace.

"Farragut, like Nelson and other worthies of the British Navy, fully appreciates the claims of the surgeon to position and emolument, but inferior minds dread loss of dignity to themselves by the elevation of civilians. The surgeons ask for inspector-grades similar to those existing in European navies, especially as the rank of admiral has been introduced into the United States Navy; and they further ask that rank shall be substantive, and accompanied by privileges; always excepting command. It is a remarkable circumstance that the Navy suffers much more than the Army from a martinet spirit, which the executive officers term, *aristocratic*—we should rather say "*pseudo-aristocratic*." We wish our American brethren early and complete redress of their grievances; and we entertain no doubt of success, so long as they contend for it, by the weapons now in use by them—viz., discussion and congressional action. The American Medical Association has accepted the cause as their own, thus showing identity of feeling and of purpose with the British Medical Association, and the event cannot fail to be fortunate."

ANNUAL MEETING OF THE MASSACHUSETTS MEDICAL SOCIETY. (*Continued.*)—To the account we gave last week of the first day's proceedings, we add the following.

Many of the Fellows visited the City Hospital on Tuesday morning, and at 11 o'clock witnessed the following operations:

1. Iridectomy, Dr. Williams.
2. Amputation of arm, Dr. Ropes.
3. Paracentesis thoracis, Dr. Bowditch.
4. Pharyngeal polypus, Dr. Cheever.

\* We have already published them.—Ed.

5. Iridectomy, Dr. Williams.
6. Glandular tumor of neck, Dr. Ropes.
7. Nasal polypus, Dr. Cheever.
8. Epithelioma, Dr. Ropes.

*Massachusetts General Hospital.*—After making the surgical visit in the wards, the members of the Society proceeded to the operating theatre.

A submaxillary tumor was removed by Dr. H. J. Bigelow. It was closely adherent everywhere, and was attached by a pedicle to the submaxillary gland deep behind the lower jaw.

Lithotomy was performed by Dr. Hodges on a boy eight years old; the existence of the stone having been known three years, and having occasioned great suffering. The lateral method was selected. The stone was large for a child of this age, weighing six drachms.

An epithelial cancer, of considerable size, was removed from the angle of the lip by Dr. H. G. Clark.

A large congenital erectile tumor of the cheek, of the size of a Chinese orange, was operated upon by Dr. Bigelow. The integuments were dissected up in order to preserve them for future covering, and the vascular mass was constricted by ligatures passed through the part subcutaneously.

Dr. Algernon Coolidge exhibited a case of severe and recent injury of the shoulder, which had just been admitted. Dr. Coolidge made some interesting remarks on the importance of accurate diagnosis in cases of this nature, dwelling especially upon the importance of anesthesia previous to examination. After enumerating the various lesions which might be mistaken for the one which had occurred, he demonstrated the prominent features of the injury in the present case, and the method usually adopted in the Massachusetts General Hospital for its treatment.

Dr. Bigelow exhibited a severe case of cleft palate successfully operated on. The fissure extended through the soft and bony palate, separating the median incisors. By stripping the soft tissues from the bony roof of the mouth, after the method of Langenbeck, he had been enabled to close the fissure completely. Silver sutures and a hard rubber shield had been employed to assist cicatrization. Dr. Bigelow also exhibited the peculiar instruments used in this operation, including the gag by which the operation is now performed under ether and in young children.

Dr. B. also presented the case of extrophy of the bladder on which he had operated before the Society at its last annual

meeting. The extrophied mucous membrane, four inches in diameter, was now wholly covered with integument taken from the neighboring abdominal walls, and the urine escaped only by a linear opening upon the pubes less than an inch in length. The patient expressed himself as immeasurably benefited by the operation.

We give the above operation reports in the order in which we received them.

The following report of the Second Day's Proceedings we compile in part from the *Advertiser* and *Transcript*; but chiefly from the notes of the anniversary chairman, and those of some of the speakers at the dinner.

The credentials of the following delegates from other societies were presented:—Dr. G. E. Bickett, of Augusta, Maine; Dr. Wm. Swazey, of the Maine Medical Society; Dr. J. C. Hutchinson and Dr. James L. Little, from the New York State Medical Society.

Dr. Kimball, of Lowell, exhibited an ovarian tumor which had been successfully excised a day or two previously from a young woman aged 31. The peculiarity of the tumor consisted in its containing a rudimentary lower jaw with rudimentary teeth. The lining of the tumor was covered with osseous scales, the whole weighing twenty-five pounds.

This led to an interesting discussion on the subject of ovarian fetation, in which Dr. Burnham of Lowell, Jackson of Boston, Storer of Boston, and Perkins of Newburyport, took part.

Dr. David W. Cheever, of Boston, read a paper on the "excision of the entire diaphysis and the lower epiphysis of the tibia from a girl of 13 years, for suppurative periostitis, followed by regeneration of the bone, and a useful limb." The child was introduced to the audience, and the limb shown. Dr. Burnham, of Lowell, and several other gentlemen, presented cases.

A motion was made that the First By-Law be amended. A discussion which ensued was ruled out of order by the President, who stated that the rules and regulations required that the motion be referred to the Councillors, to be reported on at the next Annual Meeting. We believe the motion was finally withdrawn. At all events, the hour for hearing the oration having arrived, the delivery of that discourse took precedence of all other business.

The subject of the Annual Address, which was written by Dr. Alfred Hitchcock, of Fitchburg, was "The Organic and Parallel Relations of some of the Truths and Errors

of Christianity and of Medical Science." Dr. Hitchcock being prevented from delivering the discourse, procured the services of Mr. L. B. Munroe—Professor of Vocal Gymnastics in the Boston Public Schools—who read it for him.

*The Dinner.*—Shortly after 2 o'clock the annual dinner was served in Music Hall, where plates were laid, by J. B. Smith, the caterer, for about six hundred persons. In addition to the tables in the body of the hall, other tables were also placed on the platform. Dr. J. Baxter Upham, the anniversary chairman, presided, and Mr. Eugene Thayer officiated as organist. Both before and after dinner the organ performance of Mr. Thayer and singing by a choir of gentlemen gave a most agreeable diversity to the proceedings.

After the Society had become seated, the Chairman, J. Baxter Upham, M.D., introduced the Chaplain, Dr. Lothrop, of Boston, who invoked the Divine blessing, and after an organ voluntary, the Association and its invited guests proceeded to satisfy the wants of the inner man. The musical programme executed during the dinner comprised a German chorale by Luther, a transcription from Moses in Egypt by Rossini, a *morceau* from William Tell, and variations on "God Save the King," arranged by the organist.

At the conclusion of the repast the chairman—Dr. J. B. Upham, of Boston, addressed the Society as follows:—

*Gentlemen, Fellows of the Massachusetts Medical Society:*—In the name of my associates on the Committee of Arrangements, I extend to you all the hand of brotherly affection and of welcome. I congratulate you upon the return of this anniversary under circumstances so favorable and so auspicious. I rejoice that we are permitted to gather once more, in such large numbers, around these tables of social fellowship and good cheer—in this noble hall, whose tutelary deity is the patron both of music and of medicine, consecrated alike to art, to letters and to science.

You have come up again from all parts of this ancient Commonwealth, to exchange friendly greetings—to note the progress of the profession in this and other lands—to compare views and opinions on the great questions now uppermost in our realm of science—to hail with joy any new light that may have been shed along the pathway of truth—to give and to receive encouragement and counsel for the future—to pay tribute to the genius and learning of the liv-

ing and keep alive the memory of the honored dead.

Ours has been aptly called the quiet profession. It shuns the noise and tumult and strife of every-day existence; and, as a natural consequence, mostly loses the laurels that reward the common heroes in the great battle of life. It is the old story, so truthfully and touchingly told by Dr. Holmes, in words which deserve to be written on the walls of every hospital and school of medicine in the land—

"Two armies on the trampled shores,  
Two marshalled hosts are seen:  
One marches to the drum-beat's roll,  
The wide-mouthed clarion's bray;  
One moves in silence by the stream,  
Along its front no sabres shine,  
Its banner bears the single line,  
'Our duty is to save.'"

The medical history of the past year, so far as our connection with it is concerned, may be very briefly told. I am not aware that it has been signalized by any novel or remarkable event. No wide-spread epidemic or new and dreaded form of disease has disturbed it. No deaths of very prominent and distinguished associates have saddened it. No startling discovery in physiological or pathological or therapeutical science, of which in other years we have had our full share, has set its seal upon it. We have gone on in the quiet and even tenor of our way, and the old Society, now nearing the completion of its first century of existence, is daily and nightly fulfilling its accustomed tasks.

Beyond these few words of negative allusion, therefore, I can find no excuse for detaining you with any remarks of my own. Accept, once more, my congratulations and the assurances of a sincere and hearty welcome.

The salutatory address concluded, the Chairman proceeded with the festivities of the day by introducing the following sentiment:—

"The prudent physician," says the old proverb, "is the keeper of his own counsel, thinking much, speaking little." Preeminently, such is he whom I have the honor to announce as the President of the Massachusetts Medical Society; of whom it may be said, as was once said of one of the greatest and best of men, "His merits are only equalled by his modesty." Allow me to introduce Dr. Charles G. Putnam.

The President responded as follows:—  
The ardor of our chairman's address, gentlemen, has made it impossible for me

to add, by even one spark, to the warmth of his welcome.

I shall advert for a few moments to the changes in the times, and to the contrast which naturally suggests itself, between the more recent and the earlier anniversaries of our society. Formerly we met to discuss By-laws, listen to the Annual Address, and then, after the hastiest "plate of soup," rushed to the stage-coach or the "one horse shay"—some to plough the sands of Cape Cod—some to scale the hills of Berkshire. Now, thanks to science, and to the facilities of locomotion, we can enjoy for a while the companionship of our Fellows, and reap the fruits of their industry and learning.

Similar changes are everywhere in progress. The usages of Western civilization are gaining favor in the East. Theological questions in Europe are subjected to the test of individual criticism. Civil and religious liberty is promulgated in Spain and Austria, and the rights of manhood, delicately and adroitly hinted at in Paris, are more widely than ever asserted in England. "The resurrection of nations," says Lecky, is the miracle of our age.

The face of nature is changed by the union of distant seas—the mountain is no longer a barrier, the railroad through Mont Cenis, now within a few months of completion, will restore to Italy the ancient glories of Brundisium. The telegraph has neutralized the far-reaching enterprise of the monopolist—it has regulated supply and demand in trade, and is soon likely to do our familiar errands—"riding on the curled clouds" or "treading the ooze of the salt deep" with Puck or Ariel. Nor should we fail to notice the last great work of civilization—the railroad achievement that is to revolutionize the course of trade, and make Chicago—thirty years ago a frontier settlement—the great tea depôt for the world.

In our national administration we hail the dawn of peace and prosperity, and the manifest desire to make truth and justice the corner-stone of the government. Let us hope to see it maintained with the same honesty of purpose in which it has been inaugurated. The effort, though somewhat thwarted, has already inspired refreshing trust, and, if even measurably successful, will exert a healthy influence, not merely in the arena of politics and in one city only, but in every class of society and over our whole land.

Our own science partakes of the same progress. The various appliances of natu-

ral philosophy—the more accurate and extended clinical observations—the wonderful researches of Séguin and Bernard into the properties and functions of the nervous system—the relations especially of the cerebro-spinal and vaso-motor nerves, have taught us greater certainty and discrimination in the diagnosis and treatment of disease.

J. Stuart Mill relates the story of Lord Mansfield's advice to a man of practical good sense who, having been appointed governor of a colony, had to preside in its courts of justice without previous judicial practice or legal education. The advice was to give his decision boldly, for it was sure to be right, but not to venture on assigning reasons, for they would infallibly be wrong." Nevertheless, in Law, Medicine or other vocation, he will be the better man who, all other things equal, is able to give a reason for the faith that is in him. "The knowledge that is insufficient for prediction may be most valuable for guidance," but safely as we may have been guided by observation and experience it is most desirable to ascertain the general principles applicable to our subject. In this view the recent application of Animal Chemistry is especially interesting, as it sustains, by its teachings, the practice learned from clinical experience.

It is most gratifying to be assured that not only have the pains been mitigated, but that the term of life has been extended by the art of Medicine. For instance, in his record of forty years' experience, Dr. J. C. B. Williams, of London, states that "the average duration of the life of consumptives has been at least quadrupled. In milder forms of consumption, under careful treatment, life may be prolonged for many years in comfort and usefulness, and in not very few, the disease may be permanently arrested."

Thus, directly or indirectly, by means of the light from so many sources, will general truths be discovered and a certainty attained, as absolute as the complexity and ever-varying conditions of the living body will permit. It remains for some one to collect and methodize these truths, and construct a science that will command the increased respect and subserve the best interests of the community. We would act our part in the cause of humanity with no exclusive system to maintain, no theoretical prejudice to warp the judgment, but with minds open to conviction to truth from every source.

In common with other avocations, the

practice of medicine has its share of annoyance from conceits, jests, and criticism. "The love of singularity," says Lecky, "the ambition to be thought intellectually superior to others"—these and countless other influences, all determine conclusions. As Meg Dods remarked of Lady Penelope Penfeather, "she had fallen ill as nae ither body had fallen ill, and sae she was to be cured as naeboddy was ever cured—whilk was nae mair than reasonable." So is it with Theology. One of the most profound and eloquent divines of the day, while urging the necessity of instruction in the fundamental principles of religion, goes on to say that "whenever unauthorized or crude novelties are broached under the name of religion, a full proportion of educated men and women, and of the so-called higher classes, are carried away by the folly."

To some of us the jests of Molière may be impertinent, and serious disparaging criticism is often undeserved, but there are cases, happily becoming less common, that justify the severest reprobation—cases in which polypharmacy is coupled with obtuseness, impenetrable as the shield of Ajax to any thrust short of the supernatural. Inasmuch as the truth we seek will be established by the conflict of opinion, we can tolerate—nay, more—we may be grateful for the satire of the playwright, the scepticism of the philosopher or the brilliant sallies of the poet.

It is not for us to teach ethics, nor is it worth while to array argument against a mere fabric of emotion—remembering the apothegm of Sydney Smith, that "what has not been reasoned in, cannot be reasoned out." It is our avocation to teach the means by which disease may be avoided, suffering lessened and life prolonged, and we may with reason congratulate ourselves on the success with which these ends have been attained. But self-gratulation on our present and on our past, can be but unsatisfactory, unless our future is made still more worthy of gratulation. It is our responsibilities that have given us the influential position that we hold, and if well met, they will raise that position still higher. Upon the younger men, especially, this task will rest. The pursuits of science—the courts of law—the chamber of the sick—if need be, the battle-field—call upon them for every noble quality that man or woman should possess. Availing themselves of all modern improvements, may they by every good work perpetuate the usefulness and honor of the Society, and when they recall the grand lights of wisdom and good-

ness that have for ages shone along the path of Medical Science, let the sanguine anticipations of the future be tempered with thoughtful reverence for the past.

(To be continued.)

THE HOMŒOPATHIC SALUTATORY.—Whatever may be the other merits of Dr. David Thayer's speech—reported in Tuesday's *Transcript*—he is singularly unfortunate in his personalities. He refers to a "certain teacher in a Medical College, who once made his public boast that he never had but one patient in his life, and that one died"; and identifies the gentleman referred to by a quotation from one of his printed lectures. We have taken pains to inquire into the accuracy of this statement, and find that nothing of the kind ever was or could have been said by the gentleman in question. He was physician to one of the most crowded districts of the Boston Dispensary for nearly a year; one of the physicians to the Massachusetts General Hospital for three years; and, engaged in private practice, was very often called in consultation during a period of more than ten years. There is, therefore, no meaning whatever in attributing such words to him.

It is a pity that Dr. Thayer could find nothing better to entertain the Homœopathic strangers with than such an absurd story about one of his fellow citizens.

From the Report of the City Registrar of Boston for the year 1868, we take the following statements:—"The number of births in Boston (embracing the late city of Roxbury), in the year 1868, was 7,102—3,590 males and 3,512 females, an increase of 265 over the number born the preceding year. The increase in the city of Boston was only 63, while that in the Boston Highlands was 202. The result in the newly acquired territory—where the gain is 2.14 per cent. compared with the births there in 1867—has a more agreeable aspect than is seen in Boston, where the increase is only a trifle more than one per cent.

"The population of the united cities of Boston and Roxbury cannot be far from 240,000. It follows, therefore, that the births in 1868 are in the ratio of one birth to every 33.79 persons living. Although this birth-rate is far below what it should be, and lower than it is in any European nation, with the exception of France and Belgium, it is, however, more favorable than was indicated by the rates of the last

fifteen or eighteen years; and induces the hope, at least, that the present year will not contrast unfavorably with the past.

The above statement shows what has been added to the living population; but, in estimating what the natural increase would be, but for certain causes that some might consider providential, perhaps the number of still-births should be taken into account. The number of still-births in 1868 was 482, which, added to those born alive, make 7,584—or one birth to every 31.64 persons living. But, as these cases add nothing to the population, nor aid in swelling the mortality, they are, therefore, very properly omitted in the consideration of both branches of the subject, and are classed by themselves.

"When it is remembered that in 1851 there was one birth in Boston to every twenty-six persons living, the present birth-rate (one to 33.79) will not fail to attract the notice of all who are interested in vital statistics, and awaken something more than curiosity. Whether prudential motives, or something worse, or both together, lie at the root of the matter, the disagreeable fact remains, and challenges serious consideration. Apart from the medical journals of the country, this subject seems to receive little notice; and even in them the discussions are of a spasmodic character, and gradually taper off into scientific disputations, which neither cure the evil, nor point to a remedy."

"The number of deaths in Boston (including the Highland district) during 1868 was 5,519—males, 2,861; females, 2,658.

"The following statement of the deaths in Boston, New York and Philadelphia, will show how the mortality in the first-named place compares with that of the last two. The reports of the deaths in New York and Philadelphia are not liable to the same objections that exist against the returns of births and marriages. As every interment requires a permit for removal, the mortality in each place is undoubtedly correctly stated:—

"Boston, 1 death to 43.48. New York, 1 to 44.19. Philadelphia, 1 to 59.74.

"New York has long borne the unenviable reputation of being little less than a plague spot. Those who have been accustomed so to regard it, will be somewhat surprised to learn, that, notwithstanding its filth, and the free-and-easy way in which public matters are conducted, its bill of mortality has a more agreeable appearance than that of Boston; while Philadelphia outstrips both in an extraordinary degree."

In the introduction to the Thirteenth Annual Report of the City Registrar (Edwin M. Snow, M.D.) of Providence, R. I., we find this statement:—

"The number of births in Providence, during the year, was 1,624; of marriages, 855; of deaths, 960. As compared with the previous year, the number of births was 8 less; of marriages, 43 more; of deaths, 76 less.

"Estimating the population of Providence, for the middle of the year 1867, at 57,000, which is a low estimate, the proportions to population, for the same year, were one birth in 35.1; one person married in 33.3; and one death in 59.4.\*"

"When we consider that the returns of births, marriages and deaths in Providence are almost absolutely complete, the above proportions are more favorable to vital prosperity than those of any other American city of equal, or of greater size. They are, in fact, more favorable than those of our own city, in any previous year in the history of registration."

From the Third Annual Report of the Board of Trustees of the General Hospital for the Insane, of the State of Connecticut, we take the following:—

"There have been already received into the hospital, of all classes and both sexes, two hundred and sixty-eight (268) patients, of whom two hundred and nine (209) remain. Of these, one hundred and seven (107) are males, and one hundred and two (102) are females. \* \* \* Since the last annual meeting of the Board of Trustees, April 15th, 1869, the number in the hospital is 226, and there are on file and waiting for admission, sixteen applications. \* \* \* In all hospitals for the insane it is the practice to group patients of certain morbid propensities. It is the result of experience that they exert a salutary check on each other. Since the time that the northern wing was opened on the first of March, the female patients have arrived in large numbers daily, and it was impracticable to have immediate knowledge of each particular case."

We desire to call attention to a notice in our advertising columns, that, in future, diseases of the skin presenting themselves among the out-patients of the Massachusetts General Hospital, will be treated, specially, by Dr. James C. White.

\* Vide "Philadelphia" in our extracts from Boston City Registrar's Report.—Ed.

## Medical Miscellany.

EDWIN M. SNOW, M.D., Superintendent of Health in the city of Providence, R. I., says, in his Report on Smallpox:—"During the fourteen years, nearly, July, 1855, to April, 1869, ten thousand four hundred and sixty-four (10,464) persons have been vaccinated in my office. Very many more, of course, have been vaccinated, in the same time, by other physicians in the city."

"During the same fourteen years, I have myself given certificates of vaccination to sixteen thousand three hundred and thirty-two (16,332) children to enter the public schools. Probably nine tenths of these certificates were given by me, solely from the evidence furnished by the vaccination scar, and because I had full faith in the protection furnished by vaccination against the smallpox. Now note the result!"

"During these same fourteen years I have known of nearly every case of smallpox in Providence, and have visited the greater portion of them myself, and I have never, during this time, seen or heard of a single case of smallpox in any scholar in the public schools, who received a vaccination certificate. These facts seem certainly to prove that vaccination has not lost its protective power."

"The reasons why smallpox has been so prevalent in California, and in some of our midland cities, during the past year, are perfectly well understood. They are not because vaccination has lost any protective power; but because vaccination has been neglected, or imperfectly applied. For the same reasons, smallpox is quite prevalent in New York city at the present time, and for the same reasons, we frequently have the disease, though to a much less extent, in this city."

**PENNSYLVANIA STATE MEDICAL SOCIETY.**—*Eric, June 9, 1869.* The annual meeting of the Pennsylvania State Medical Society will be held in the Court House, commencing June 9th, at 4 o'clock, P.M. Entertainments and receptions:—Wednesday evening, reception by Capt. Jouett, U.S.N., on board U.S.S. Michigan, at 8½ o'clock. Thursday evening, banquet at the Reed House, at 8 o'clock. Friday, 11 o'clock, A.M., excursion on Lake Erie, in steam and pleasure yachts, and sail boats, and collation at Crystal Point at 4 o'clock, P.M. J. L. Stewart, M.D., Chairman Com. Arrangements, Erie County Society. C. Brandes, M.D., Chairman Reception Committee, Erie County Society. George C. Bennett, M.D., Chairman Com. Arrangements, State Society.

The above is a copy of a programme which has been sent us. What is more—the Committee of Arrangements had the kindness to send us an invitation to the festivities. For this courtesy we present our profound acknowledgments. Nothing but inability to leave home prevents our acceptance.

**MASSACHUSETTS MEDICAL SOCIETY'S PRIZE FOR VENTILATING SICK-ROOMS.** *Mr. Editor,*—The *N. Y. Medical Gazette* omitted one essential to the final success of his way of escape from the

closeness of the sick-room—viz., to let the patient have "the gates ajar," or "the gates wide open!" The Editor of the *N. Y. Medical Gazette* may send the prize-money (when he gets it) to this office, for  
"NUSS."

**PIN-WORMS AND THEIR HOMŒOPATHIC TREATMENT.** *Mr. Editor,*—Dr. Buckingham wishes to suggest to the Editor of the *New England Medical Gazette*, that, if he (the Editor) will re-publish the article with the above title, which so offends the mock delicacy of that gentleman and his correspondent Vindex, it will be an accommodation to Dr. B., inasmuch as it will stop the numerous calls upon Dr. B. for the article. He regrets exceedingly that the worms have so troubled the Editor of the *Gazette* that he continues to scratch for two months after the application.

**THE CASE OF SAW-WOUND OF THE SKULL.**—We have received the May number of the *Pacific Medical and Surgical Journal*, containing an account of the case of recovery from a saw-wound of the skull, which we referred to a short time ago. We shall copy as soon as we can find room for it.

Pig's milk is extremely rich, containing, as it does, nearly 50 per cent. more nutritive matter than is found in that of the cow. It is not unlikely that in certain forms of disease, where a milk diet is prescribed, the use of so concentrated a liquid food might prove serviceable.—*Dublin Med. Press and Circular.*

## MEDICAL DIARY OF THE WEEK.

**MONDAY, 9, A.M.,** Massachusetts General Hospital, Med. Clinic. 9, A.M., City Hospital, Ophthalmic Clinic.  
**TUESDAY, 9, A.M.,** City Hospital, Medical Clinic, 10, A.M., Surgical Lecture. 9 to 11, A.M., Boston Dispensary. 9-11, A.M., Massachusetts Eye and Ear Infirmary.  
**WEDNESDAY, 10, A.M.,** Massachusetts General Hospital, Surgical Visit. 11 A.M., OPERATIONS.  
**THURSDAY, 9, A.M.,** Massachusetts General Hospital, Medical Clinic. 10, A.M., Surgical Lecture.  
**FRIDAY, 9, A.M.,** City Hospital, Ophthalmic Clinic, 10, A.M., Surgical Visit; 11, A.M., OPERATIONS. 9 to 11, A.M., Boston Dispensary.  
**SATURDAY, 10, A.M.,** Massachusetts General Hospital Surgical Visit; 11, A.M., OPERATIONS.

**TO CORRESPONDENTS.**—The following communications have been received:—Review of Surgical Case—Review of Holmes's Treatise on Diseases of Infancy, &c.—Congenital Cataract stimulating Myopia—Insensibility to Pain from Mental Causes.

**ERRATUM.**—In our last issue, page 327, 2d column, line 25 from top, for "acid wine" read acid urine.

**DEATHS IN BOSTON** for the week ending Saturday noon, June 5, 83. Males, 36—Females, 49.—Ascens, 1—accident, 3—apoplexy, 1—inflammation of the bowels, 2—disease of the brain, 3—inflammation of the brain, 1—bronchitis, 4—cancer, 1—consumption, 15—debility, 2—diphtheria, 1—dropsy of the brain, 2—drowned, 1—erysipelas, 2—scarlet fever, 5—typhoid fever, 1—hemorrhage, 1—disease of the heart, 2—insanity, 1—disease of the kidneys, 2—inflammation of the lungs, 6—marasmus, 1—old age, 6—paralysis, 3—peritonitis, 1—pleurisy, 2—premature birth, 1—puerperal disease, 3—pyæmia, 1—tumor, 1—unknown, 9—whooping cough, 1. Under 5 years of age, 19—between 5 and 20 years, 12—between 20 and 40 years, 20—between 40 and 60 years, 19—above 60 years, 15. Born in the United States, 65—Ireland, 20—other places, 10.